SINGER
142W25

USE ONLY SINGER OILS and LUBRICANTS

They insure freedom from lubricating trouble and give longer life to sewing equipment

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"Singer Oil for High Speed Sewing Machines"
(Cloth and Leather)

For all manufacturing sewing machines except where a stainless oil is desired.

"Singer Stainless Oil for High Speed Sewing Machines"

For all manufacturing sewing machines where a stainless oil is desired.

"Singer Motor Oil"

For oil-lubricated motors, power tables, transmitters and machinery in general.

"Singer Stainless Thread Lubricant"

For lubricating the needle thread of sewing machines for stitching fabrics or leather where a stainless thread lubricant is required.

NOTE: All of the above oils are available in 1 quart, 2 quart, 1 gallon and 5 gallon cans or in 55 gallon drums, and can also be supplied in customer's containers.

"Singer Gear Lubricant"

This specially prepared grease is recommended for gear lubrication on manufacturing sewing machines.

"Singer Ball Bearing Lubricant"

This pure grease is specially designed for the lubrication of ball bearings and ball thrust bearings of motors and electric transmitters, ball bearing hangers of power tables, etc.

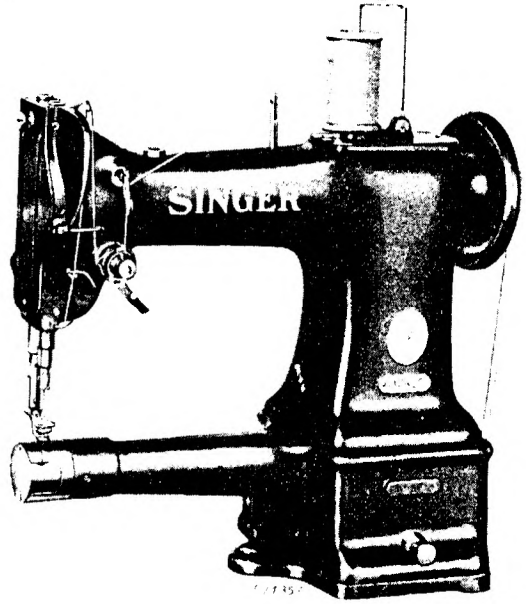
NOTE: The above greases are furnished in ¼ lb. tubes and 1 lb. and 4 lb. tins.

2590w

INSTRUCTIONS

FOR USING AND ADJUSTING

SINGER SEWING MACHINE



142w25

FOR DARNING

THE SINGER MANUFACTURING COMPANY

To all whom it may concern:

The placing or renewal of the name "Singer" (Reg. U. S. Pat. Off.) or any of the trade marks of The Singer Manufacturing Company on any machine that has been repaired, rebuilt, reconditioned, or altered in any way whatsoever outside a Singer factory or an authorized Singer agency is forbidden.

THE IMPORTANCE OF USING GENUINE SINGER PARTS AND NEEDLES IN SINGER MACHINES

The successful operation of Singer machines can only be assured if genuine Singer parts and needles are used. Supplies are available at all Singer Shops for the Manufacturing Trade and mail orders will receive prompt attention.

Genuine Singer Needles should be used in Singer Machines.
These Needles and their Containers are marked with the Company's Trade Mark "SIMANCO." 1

Needles in Containers marked "For Singer Machines" are not Singer made needles. 2

DESCRIPTION

MACHINE 142w25 has one needle and a rotary sewing hook and makes the lock stitch.

It is designed for mending and darning stockings, socks, knit underwear, linen, curtains, etc., and is used in laundries, hotels, hospitals and other public or private institutions where darning equipment is required.

It has a cylinder bed which enables it to conveniently darn tubular shaped articles, the diameter of the cylinder being small enough to accommodate a baby's sock.

When desired, the machine can be instantly converted into a flat bed machine by attaching the flat work plate which will be furnished, on order, at additional charge.

The operator can freely move the work in any direction while darning as there is no feeding mechanism and the presser foot rises automatically after each stitch.

The machine can be equipped with Cylinder End Cover and Thread Cutter complete 241230, which is desirable when darning socks, etc., since it permits the bobbin thread to be cut close to the darn without removing the sock from the cylinder, thus saving time and thread.

Speed

The maximum speed recommended for Machine 142w25 is 2800 stitches per minute. When the machine is in operation, the balance wheel should always turn over toward the operator.

To Oil the Machine

When the machine is received from the factory, it should be thoroughly cleaned and oiled.

Oil should be applied to the oil holes shown by arrows in Figs. 2 and 3 and all other places where there are parts in movable contact. When the machine is in continuous use, it should be oiled at least twice each day.

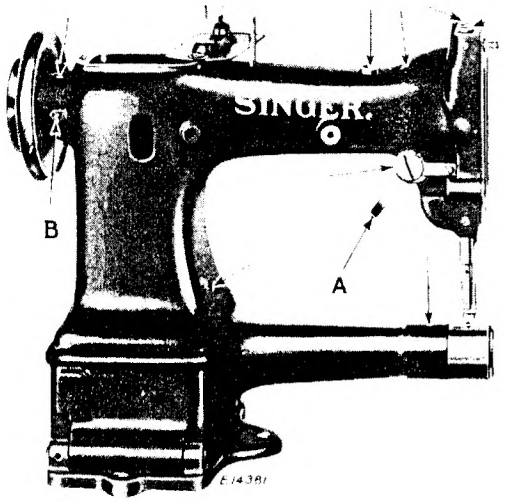


Fig. 2. Oiling Points and Adjustments at Rear of Machine

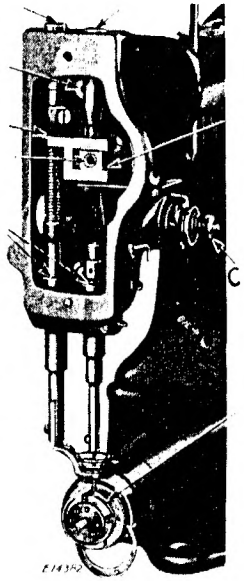


Fig. 3. End View of Machine, Showing Oiling Points

Oil the bobbin case bearing in the sewing hook race each time a bobbin is replaced.

Needles

Needles for Machine 142w25 are of Class and Variety 135 x 1 and are made in sizes Nos. 12 to 24.

The size of the needle to be used should be determined by the size of the thread which should pass freely through the eye of the needle. If rough or uneven thread is used or if it passes with difficulty through the eye of the needle, the successful use of the machine will be interfered with.

Orders for needles must specify the QUANTITY required, the SIZE number, also the CLASS and VARIETY numbers separated by the letter x.

The following is an example of an intelligible order:

"100 No. 16 135 x 1 Needles."

The best results will be obtained when using the needles furnished by the Singer Sewing Machine Company.

Thread

Left twist thread should be used in the needle. Either right or left twist can be used in the bobbin.

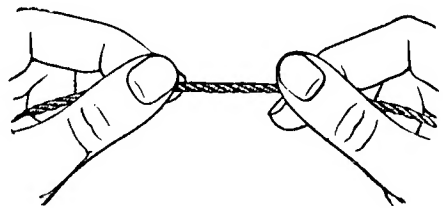


Fig. 4. How to Determine the Twist

Hold the thread as shown above. Turn the thread over toward you between the thumb and the forefinger of the right hand; if left twist, the strands will wind tighter; if right twist, the strands will unwind.

To Remove the Bobbin

Open the cylinder end cover cap (J,Fig.6) by pressing down with the thumb nail inserted in the slot. Open the [illegible]n case latch (H,Fig.6) and remove the bobbin.

To Wind the Bobbin

(See Fig. 5)

Fasten the bobbin winder to the table with its driving pulley in front of the machine belt, so that the pulley will drop away from the belt when sufficient thread has been wound upon the bobbin.

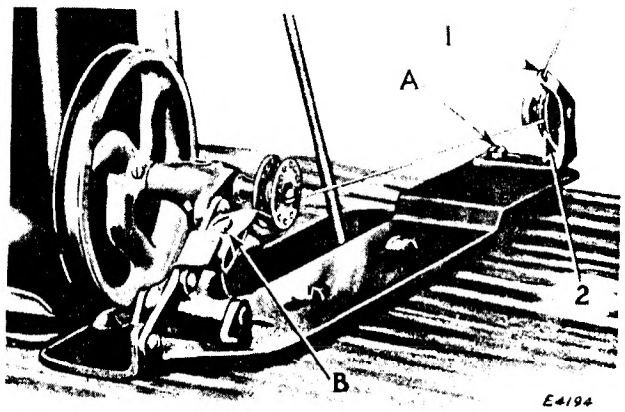


Fig. 5. Winding the Bobbin

Place the bobbin on the bobbin winder spindle and push it on as far as it will go.

Pass the thread down through the thread guide (1) in the tension bracket, around the back and between the tension discs (2). Then wind the end of the thread around the bobbin a few times, push the bobbin winder pulley over against the machine belt, and start the machine.

When sufficient thread has been wound upon the bobbin, the bobbin winder will stop automatically.

If the thread does not wind evenly on the bobbin, loosen the screw (A) in the tension bracket and move the bracket to the right or left, as may be required, then tighten the screw.

The amount of thread wound on the bobbin is regulated by the screw (B). To wind more thread on the bobbin, turn the screw (B) inwardly. To wind less thread on the bobbin, turn this screw outwardly.

Bobbins can be wound while the machine is stitching.

To Thread the Bobbin Case

Place the bobbin in the bobbin case, with the thread leading from the top toward you; hold the thread with the right hand and

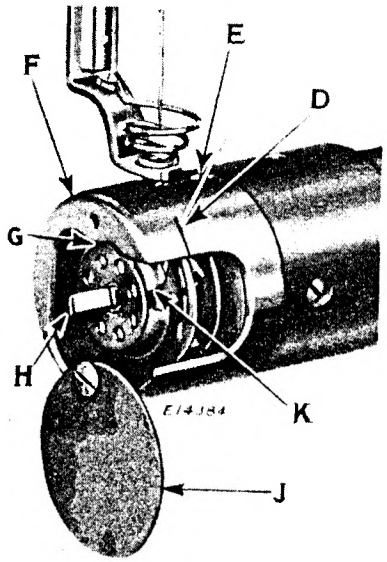


Fig. 6. Threading Bobbin Case

guide it into the notch (K,Fig.6), then close the latch (H); draw the thread up to the top of the slot (D,Fig.6) and close the cap (J).

To Set the Needle

Turn the balance wheel over toward you until the needle bar is at its highest point; loosen the set screw in the lower end of the needle bar and put the needle up into the bar as far as it will go with its long groove toward the right and the eye of the needle directly in line with the cylinder bed of the machine, then tighten the set screw.

Upper Threading

Pass the thread from the spool or unwinder, from back to front through the lower hole in the pin on top of the machine and

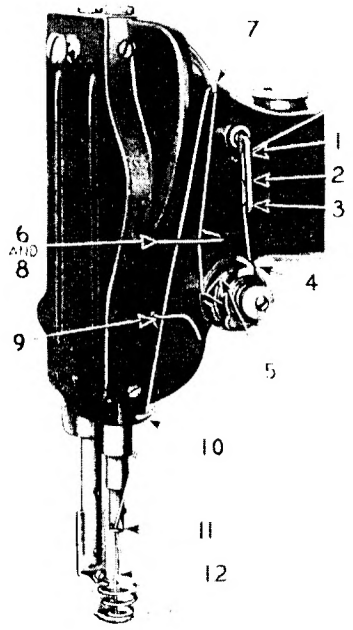


Fig. 7. Upper Threading

from right to left through upper hole in pin, from right to left through the top hole (1), from left to right through the center hole (2) and from right to left through the bottom hole (3) in the thread guide at the front of the machine, down under from right to left between the tension discs (4), up into the fork (5) of the thread controller against the pressure of the thread controller spring, through the thread guide (6), from right to left through the take-up lever (7), down through the thread guide (8), through the thread guides (9 and 10), through the hole (11) in the lower end of the needle bar and from right to left through the eye of the needle (12). Draw about three inches of thread through the eye of the needle with which to commence sewing.

To Prepare for Sewing

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle. Turn the balance wheel over toward you until the needle moves down and up again to its highest point, thus catching the bobbin thread; draw up the needle thread and the bobbin thread will come up with it through the needle hole. Lay the threads back under the presser foot.

To Commence Darning

Place the work under the presser foot. Having the unworn part of the work near the hole under the needle, commence the

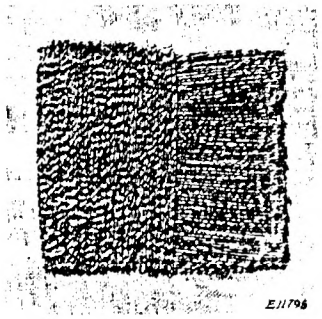


Fig. 8. Darning in Process

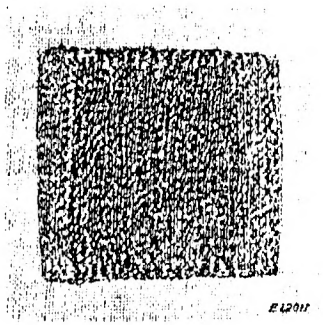


Fig. 9. Darning Finished

darning by making a line of stitches across the hole a little longer than the width of the hole. Continue making parallel lines of stitches across the hole, moving the work backward and forward and at the same time gradually moving the work sidewise until the hole is covered with lines of stitches running across the hole. Then commence as before and move the work lengthwise of the hole until the stitches across the hole are completely covered and the darn is finished.

When darning flat work, it is advisable to use embroidery hoops to hold the work.

To Remove the Work

Stop the machine with the thread take-up lever (7, Fig.7) at its highest point, and press the tension release lever (A, Fig.2) to the left to release the tension. Draw the work backward and cut the threads close to the goods, leaving two or three inches of thread with which to commence sewing. The tension is automatically reengaged.

NOTE: When the machine is equipped with Cylinder End Cover Thread Cutter (No. 241230 complete), the bobbin thread can be cut before removing the work from the cylinder by moving the darn back over the cutter until the bobbin thread enters the nipper spring (A,Fig.10) and is cut by the cutter (B). The end of the bobbin thread is held in the nipper spring ready for the next darn.

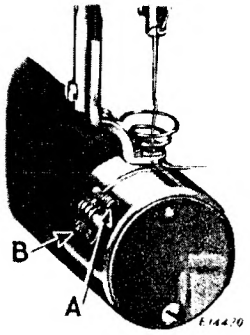


Fig. 10. Thread Cutter

Tensions

The needle and bobbin threads should be locked in the center of the thickness of the material, thus:

Fig. 11. Perfect Stitch

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:

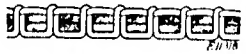


Fig. 12. Tight Needle Thread Tension

If the tension on the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus:

Fig. 13. Loose Needle Thread Tension

To Regulate the Tensions

The tension on the under thread is regulated by the screw (S, Fig.17) in the center of the tension spring on the outside of the bobbin case. To increase the tension, turn the screw (S) over to the right. To decrease the tension, turn the screw over to the left. See that there is no lint or dirt under the tension spring.

Correctly made stitches, as shown in Fig. 11, can usually be obtained by regulating the upper tension only, turning the tension thumb nut (C,Fig.3) inward to tighten and outward to loosen the tension.

Work Plate

For darning flat work, such as table cloths, sheets, towels, aprons, lace curtains, etc., Work Plate complete, No. 241267 will be found very convenient and will be supplied when specified on order, at additional charge.

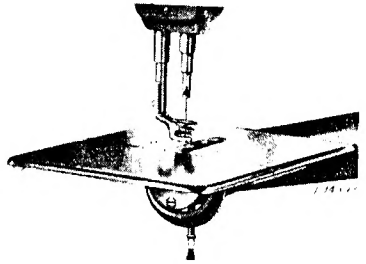


Fig. 14. Work Plate Attached to Machine

To Attach Work Plate

Draw toward you the cylinder end cover cap (J,Fig.6) and slide the yoke of the work plate over the cylinder end, then tighten the thumb screw enough to hold the work plate as shown in Fig. 14.

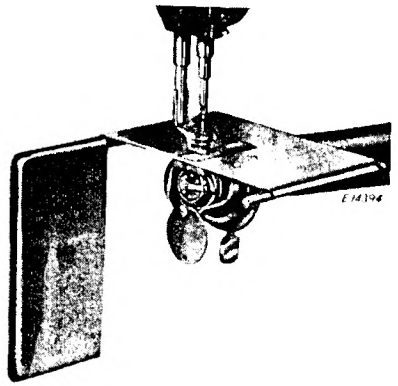


Fig. 15. Hinged Section of Work Plate Turned Back

To aid in quick replacement of bobbins, turn back the left hand portion of the work plate as shown in Fig.15. This can be accomplished without removing the work from the machine.

INSTRUCTIONS

FOR

ADJUSTERS AND MACHINISTS

Thread Controller

The function of the thread controller spring is to hold back the slack of the needle thread until the eye of the needle reaches the goods in its descent, as without this controlling action of the spring, the slack thread or silk (more especially silk) will sometimes be penetrated by the point of the needle as the needle is descending.

To Adjust the Thread Controller

For more controller action on the thread, loosen the stop screw (N,Fig.16) at the right of the tension and set the stop lower, and for less action, set the stop higher.

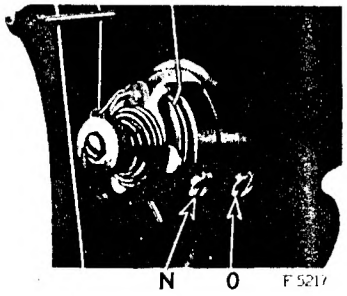


Fig. 16. Adjustments of Thread Controller

To strengthen the action of the controller spring on the thread, loosen the tension stud screw (O,Fig.16) at the right of the stop screw and turn the tension stud slightly to the left with a screwdriver, or to lighten its action on the thread, turn the tension stud to the right and tighten the tension stud screw (O).

To See if the Needle Bar is Set Correctly

See that the needle is up in the bar as far as it will go. The needle bar which is in the machine when shipped from the factory has upon it (about 1 1/2 inches from the bottom) two lines 3/32 inch apart.

When the needle bar is at its lowest position, the upper mark should be just visible at the end of the bushing.

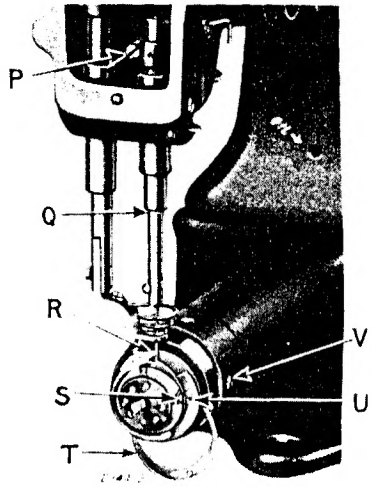


Fig. 17. Needle Bar and Hook Adjustments

TO SET THE NEEDLE BAR IN CORRECT TIME. Loosen the needle bar connecting stud pinch screw (P,Fig.17) and place the needle bar in the proper position as directed above, then retighten the screw.

TO SET A NEEDLE BAR WHICH HAS NO MARK. Set the needle bar so that when it rises 3/32 inch from its lowest position and the point of the hook is at the center of the needle (see R,Fig.17), the eye of the needle will be about 1/16 inch below the hook point.

To See if the Hook is Correctly Timed

Take out the screw (E,Fig.6) and remove the cylinder end cover (F,Fig.6). Turn the balance wheel toward you until the lower mark (Q,Fig.17) across the needle bar, as it is going up, is just visible at the end of the bushing; now, if the needle bar and hook are in correct time the point of the hook will be at the center of the needle and about 1/16 inch above its eye (see R, Fig.17).

To Time the Hook

Loosen the screws (X,Fig.18) in the hook shaft connection belt pulley and turn the balance wheel toward you until the needle bar goes to its lowest position and upward until the lower mark (Q,Fig.17) across the needle bar is just visible at the end of the bushing, then stop turning and hold the wheel firmly; with the left hand, turn the hook until the point (R,Fig.17) is at the center of the needle — 1/16 inch above its eye — see that the end play to the shaft is almost eliminated, then retighten the pulley screws (X).

To Remove the Hook

Loosen the screws (X,Fig.18), remove the screw (E,Fig.6) and the cylinder end cover (F), and draw out the hook and shaft (W, Fig.18).

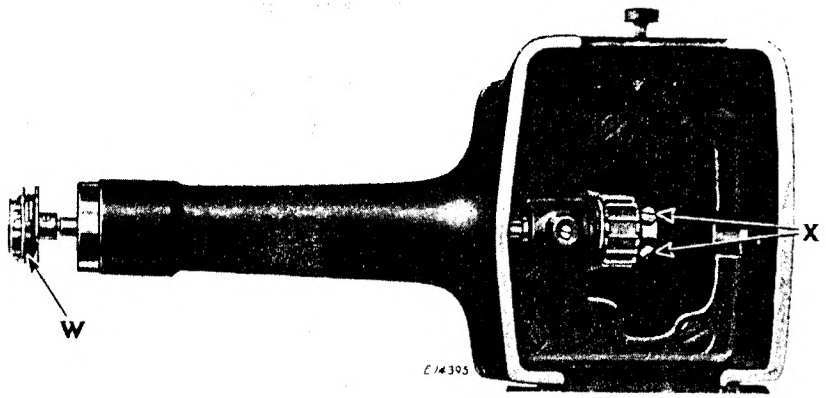


Fig. 18. Removing the Hook

To Set the Hook To or From the Needle

Loosen the set screws (X,Fig.18) and the set screw (V,Fig.17) that holds the bushing, and carefully drive the bushing to the right to set the hook closer to the needle, or to the left to set it farther from the needle. After carefully adjusting and timing the hook to the needle, tighten the screws (V,Fig.17 and X,Fig. 18). Leave the least amount of end play possible to the shaft, for lubricating purposes.

To Remove the Bobbin Case

To remove the bobbin case from the sewing hook to thoroughly clean the bobbin case, remove the screw (U,Fig.17) and open the gib (T); turn the balance wheel until the point of the hook is toward you and remove the bobbin case. See that there is no lint or dirt under the tension spring.

When replacing the bobbin case in the sewing hook, have the position the same as when removing it. Be sure to have the notch at the top of the bobbin case (at G,Fig.6) entered by the stop on the cylinder end cover, then close the gib (T,Fig.17) and securely tighten the screw (U), being careful not to damage the head of the screw.

To Remove the Belt from Within the Arm

Slide the arm shaft connection belt (Y,Fig.19) off the lower pulley, remove the balance wheel from the end of the arm shaft, loosen the arm shaft bushing (back) screw (B,Fig.2) and remove the bushing, lift the belt up through the arm cap hole as far as possible and draw it out through the space formerly occupied by the bushing.

When replacing the belt see that the sewing hook and needle are in correct time before running the belt on the lower pulley, and verify the correctness of the timing before commencing to sew.

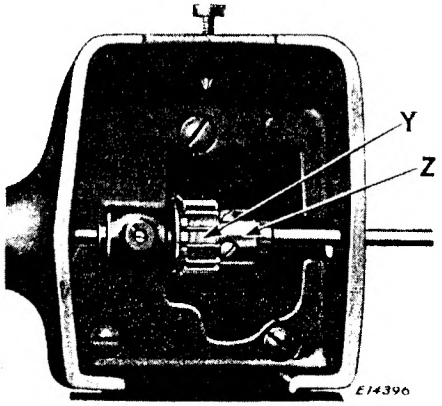


Fig. 19. Putting Belt on Lower Pulley with Belt Replacer 244005

To facilitate the replacing of the belt on the lower pulley, use belt replacer 244005 (V,Fig.19). Rest the replacer in the loop of the belt and slide it over the hub of the pulley, as

shown in Fig.19, having the notches in the replacer engage the two set screws in the hub of the pulley. Turn the balance wheel toward you until the belt is fully over the pulley, then remove the replacer.

NOTE: As belt replacer 244005 will serve for several machines, it is not regularly furnished with the machine, and must be ordered separately.